REMARKS

This responds to the Office Action mailed on 09/21/2005. Claims 1, 5, 13, 18, 20 and 26 are amended, claims 4, 6, 12, 19, and 32 are cancelled, as a result, claims1-3, 5, 7-11, 13-18, and 20-31, and 33-40 are now pending in this application.

§102 Rejection of the Claims

Claims 1-4, 6-7, 10-13, 16-19 are rejected under 35 U.S.C. § 102 as being unpatentable over Brooks *et al.*(U.S. 5,753,517). Applicant has amended independent claim 1 to incorporate the additional element of the binding pair complexbeing in fluid suspension. The particles in Brooks are labeled with an electroactive marker and the particle is affixed to a substrate and therefore are not in fluid suspension as at least one member of the binding pair complex is embedded in a fixed substrate. Therefore amended claim 1 is patentable over Brooks.

Claims 2-4, 6-7, 10-13, and 16-19 depend from claim 1 and are patentable for at least the reasons as cited in support of claim 1.

§103 Rejection of the Claims

Claims 25, 26, 31 and 32 are ejected under 35 U.S.C. § 103(a) as being unpatentable over Bamdad (U.S. 2003/0059955) in view of Brooks *et al* (U.S. 5,753,517). Applicant traverses the rejection.

Claims 25, 26, 31 and 32 depend from Claim 20. Claim 20 is amended to incorporate a binding pair complex in fluid suspension, electrochemical testing via voltammetry and amperometry and the electroactive marker encapsulated within the microsphere.

Brooks teaches away from the present invention in that Brooks teaches having the labeled particle embedded in a detection pad and not in fluid suspension upon forming a binding pair complex. Bamdad does not make up the deficiency of Brooks. Bamdad teaches detecting electromagnetic radiation within a narrow wavelength for nanocrystals with markers attached to their surface. Bamdad fails to teach electroactive markers encapsulated within a microsphere, releasing an electroactive marker; and detecting the electroactive marker after release from the

microsphere via voltammetry or amperometry. Instead, Bamdad teaches loading the surface of the crystals with a label, and detecting the label via optical detection of electromagnetic radiation in a narrow wavelength band. Further, Bamdad does not disclose release of the electroactive marker from the nanocrystal. Since neither Brooks nor Bamdad teach each and every element of claim 20 either alone or in combination, claim 20 is patentable over Bamdad and Brooks. Claims 25, 26, 31 and 32 depend from claim 20 and are patentable for at least the same reasons cited in support of claim 20.

Claim 5 is rejected under 35 USC §103(a) as being unpatentable over Bamdad in view of Barbera-Guillem *et al.* (US 6, 680, 211). Applicant traverses the rejection.

Applicant has amended claim 1 from which claim 5 depends. Claim 1 includes the element of detecting the specific binding pair complex by electrochemical testing for the electroactive marker released from the microsphere and wherein electrochemical testing is via voltammetry or amperometry. Barbera-Guillem teaches polymer-based microspheres wherein the microspheres are labeled with one or more types of fluorescent nanocrystals. The electroactive agent of Barbera-Guillem (fluorescent nanocrystal) would not be detected with voltammetry or amperometry. Claim 5 has been amended to more clearly define the electroactive marker to be the electroactive marker of claim 1 that is detected via voltammetry or amperometry. Therefore claim 5 is patentable over Bamdad and Barbera-Guillem.

§102(e) Rejection of the Claims

Claims 1-4, 6-11, 14-17, 20-24, 27-30 are rejected under 35 USC §102(e) as anticipated by Bamdad. Applicant traverses the rejection.

Claims 1 and 20 have been amended to more clearly define what Applicant conceives as his invention. Claims 1 and 20 include an electroactive marker which is encapsulated within the microsphere. In contrast, Bamdad loads the surface of nanocrystals. Bamdad does not teach or suggest encapsulating an electroactive marker within the nanocrystal. Therefore Bamdad does not teach every element of claims 1 or 20. Therefore claims 1 and 20 are patentable over Bamdad.

Claims 2-6, 6-11, 14-17, 21-24, 27-30 depend from claims 1 or 20 and are patentable for at least the reasons cited in support of claims 1 and 20.

Claim 1, 2, 4, 7, 10-12, 17, 18 are rejected under 35 USC §102(e) as being anticipated by Knoll (US 6,548,311). Applicant traverses the rejection.

Claim 1 has been amended to more clearly define that which Applicant conceives as his invention. Specifically, electrochemical testing is via voltammetry or amperometry. Knoll only teaches detecting electric field differences for charged or magnetic particles. Knoll does not teach voltammetry or amperometry. Therefore claim 1 is patentable over Knoll. Claims 2-4, 7, 10-12, 17 and 18 depend from claim 1 and are patentable for at least the reasons cited in support of claim 1.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 13-4213.

Respectfully submitted,

Date 1/23/2006

By _____
Janeen Vilven,
Reg. No. 47,156
Direct line (505) 998-6134

PEACOCK MYERS, P.C.
Attorneys for Applicants
Post Office Box 26927
Albuquerque, New Mexico 87125-6927
Telephone: (505) 998-6134
Facsimile: (505) 243-2542
Customer No. 005179